Senate Committee on Campaign Finance Reform, Rural Issues & Information Technology

Wednesday, January 16th, 2008

Testimony of Beata Kalies, Wisconsin Federation of Cooperatives

In Support of SB 381

Current state law requires that any one-and two-family dwelling which uses electricity for space heating to be superinsulated. Statutes do not define the requirements, but the building code has different and stricter standards for electrically heated systems. The general interpretation is "more insulation".

This requirement was established by an amendment to the state budget back in 1983. The amendment directed the PSC and DILHR (predecessor to the Department of Commerce) to create a rule requiring superinsulation for electric heat sources. There was little if any public input and no legislative vote on this particular provision was taken. The intent was to limit usage of electric heat sources especially in situations when tenants were paying the utility bill but had no control over how their landlords weatherized their building. Back in the 1980's this may have seemed useful since natural gas was cheap and abundant.

The problem is that the rule does not apply to apartments, but to new single and two family homes. In addition, the term "superinsulation" is not defined, and appears rather vague. Does it mean more insulation than used in 1980 or more than generally used in recent construction trends? Is it more insulation than what is used for natural gas?

Fuel prices have fluctuated over the years. New construction today can be considered better insulated now than 20 years ago. The superinsulation requirements are unfair and outdated.

In rural areas of Wisconsin, electricity, propane, fuel oil or wood are often the only choices. Natural gas is not available in many parts of the state.

The 2006 Wisconsin Energy Statistics Report shows that based on a 2000 census, electricity is used for heating by 11% of the population, compared with 66% using natural gas and 11% propane. In the same report, new construction trends reveal increasing saturation of natural gas and propane use for space heating. Natural gas sources account for 65.6%, propane for 19.1% and only 1.2% for electric.

We are not suggesting a reduction in code requirements, only fair and equal treatment of all heating sources. The building code should not be based on a specific heating system but be fuel neutral. Efficiency and conservation measures need to be encouraged for all heating systems and fuel diversity provides the most options.

The choice of a heating system should be up to the homeowner. Our co-op members are entitled to choose what type of heating system to use in their own home based on their own needs and not be limited by artificial barriers.

With the current requirements, it is more expensive and inconvenient to meet code. Superinsulation means at least a 15 % increase in insulation levels which equals $2 more per square foot in construction costs.

Electric heat systems have come a long way in the last 25 years. Electric power can be generated from renewable sources such as methane gas from landfills or extract heat from the ground. These Geothermal Heat Pumps are 350% efficient and provide cooling as well with the same equipment. Radiant Electric Heat Panels - heat objects instead of air and can be installed as cables in floors, heated by a boiler. Electric Thermal Storage – are ceramic bricks that store heat during off-peak hours to be used later during peak demand thus reducing energy use. Even baseboard type heating, has its benefits. These electric heat systems are great for seasonal use and in cabins because they can be plugged only when needed. (One of our co-ops has about 70% of its members as seasonal.)

No other state has such requirements.

SB 381 and its companion AB 231 repeal the superinsulation language. We ask that the committee support this bill repealing the outdated statute and let consumers decide how best heat their homes.

Testimony to the Wisconsin State Senate
Committee on Campaign Finance Reform, Rural Issues and
Information Technology in Support of Senate
Bill 380

Bob Sather – Board Chair, Ace Ethanol and President, Wisconsin Bio Industry Alliance

Good morning Committee Members:

My Name is Bob Sather and I am the president of the Wisconsin Bio Industry Alliance and Chair of Ace Ethanol Board of Directors. My Home address is 11010 161st Street, Chippewa Falls, WI 54729.

The central theme of my remarks will be about the myths regarding bio-fuels in general and ethanol in particular, but permit me to preface my comments with this statement:

We are currently importing about 2/3 of our oil consumption, and a great deal of that comes from countries such as Saudi Arabia, Nigeria and Venezuela with Iran exporting its oil to other countries. This global pool of oil is vulnerable to disruptive and unstable governments that could close the spigot to the world's addiction and dependency on oil. Additionally, oil at $100 a barrel means that we are increasing our trade deficit each day by about one billion dollars just for oil. We are losing equity in this country a billion dollars each and every day.

The bill before this committee today will not solve our energy crisis in total but it is a step in the right direction in moving toward energy independence. Citizens of the state should be proud of this bipartisan effort.

MYTH OR FACT:

- Myth: Ethanol uses too much water -
- FACT: The US Environmental Protection Agency, Division of Water Quality cites - it takes about 3 gallons of water to make a gallon of ethanol. However, it takes 44 gallons of water to produce a gallon of gasoline and we refine a great deal of gasoline in this country. It takes 11.6 gallons of water in processing one chicken and one gallon of water for each quarter pound of hamburger. Also, a midsized ethanol plant (40 million gallons per annum) consumes about the same amount of water as a municipal golf course- and provides much more economic and social benefits.
- Myth: Ethanol is energy negative because it takes more BTU's to make ethanol than we get in the produced ethanol -
- FACT: Recent independent studies by Argonne National Laboratory and verified by USDA together with some 7 additional studies find that ethanol creates 60% more energy than it takes to make it. The same study shows that producing gasoline is energy negative by 20%.
- Myth: Ethanol producers receive a federal subsidy of 51 cents per gallon of tax credits –
- FACT: The blenders who are for the most part "Big Oil" that blend the fuel are the recipients of the 51 cents per gallon of tax credits. Ace Ethanol in Stanley has never received a penny of the blenders' tax credit. Speaking of subsidies, the federal tax credit received for blending ethanol pales in comparison to the hundreds of billions of dollars that "Big Oil" receives in federal tax credits for depletion and deep water drilling allowances.
- Myth: Ethanol is protected by 54 cents a gallon tariff on imported ethanol –
- FACT: Brazil and other countries that export ethanol to the United States receive the same 51 cents a gallon of blenders' tax credit from you, the tax payer, as received by USA ethanol producers'. Accordingly, the tariff is a tax credit off-set against imported

ethanol. Why should US tax payers subsidize imported Brazilian ethanol when the Brazilian Government has already heavily subsidized ethanol production?

- Myth: Ethanol Production is the primary reason for higher food costs because too much corn is used –
- FACT: A recent study by Informa, an independent economic research firm found that because of the high cost of crude oil it accounts for nearly all the recent increased cost for high food prices whereas crop products account for only about 4% of recent increased costs.
- Myth: Ethanol does little to improve the environment –
- FACT: Ethanol reduces greenhouse emissions by 29 percent compared to the equivalent gallon of gasoline. New technologies and new feed stocks could yield reductions of nearly 90 percent. Further, the US Department of Energy cites the use of 5 billion gallons of ethanol in motor cars in 2006 has reduced gas emissions the equivalent of removing more than 1.2 million cars from American roads.
- Myth: Ethanol is responsible for the current corn shortage –
- FACT: USDA estimated the 2007 corn crop to be more than 13 billion bushels. The ethanol industry used about 2.3 billion bushels or about 16 percent of the nations corn supply. The National Corn Growers Association projects that ethanol demand for corn and corn supply will continue on an even trend because of yearly increased corn yields through genetic improvements. On average, yields have increased by 3.5 bushels per acre per year since 1995. Based on historical data, the NCGA predicts corn yields have increased to about 180 bushels per acre by 2015 compared to 150 bushels per acre in 2006. Corn is a global commodity that has been surging in demand due to international droughts, a weak dollar and third world countries' such as India and China increased demand.
- Myth: Ethanol is bad for your car engine.
- Fact: Every major automaker in the world approves the use of E-10 Unleaded gasoline under warranty. Additionally, ethanol adds about 3 points of octane to gasoline helping to improve engine performance. Ethanol helps keep injectors clean and at the same time it lowers the levels of toxic exhaust emissions. And now new research shows that midlevel ethanol blends (20% to 30%) can improve fuel mileage.

Commerce Public Hearing Testimony
Senate Bill 381
Super-insulation Repeal
Senate Committee on Campaign Finance Reform, Rural Issues
and Information Technology
January 16, 2008

Good Afternoon.

My name is Bob DuPont.

I am the Director of Program Development in the Safety and Buildings Division of the Department of Commerce.

I am testifying on behalf of Secretary Fischer.

The Department of Commerce supports Senate Bill 381.

We believe that the present mandate for super-insulation should be repealed.

Over the last 25 years significant advances have occurred relative to the generation of electrical power and electrical heating technology.

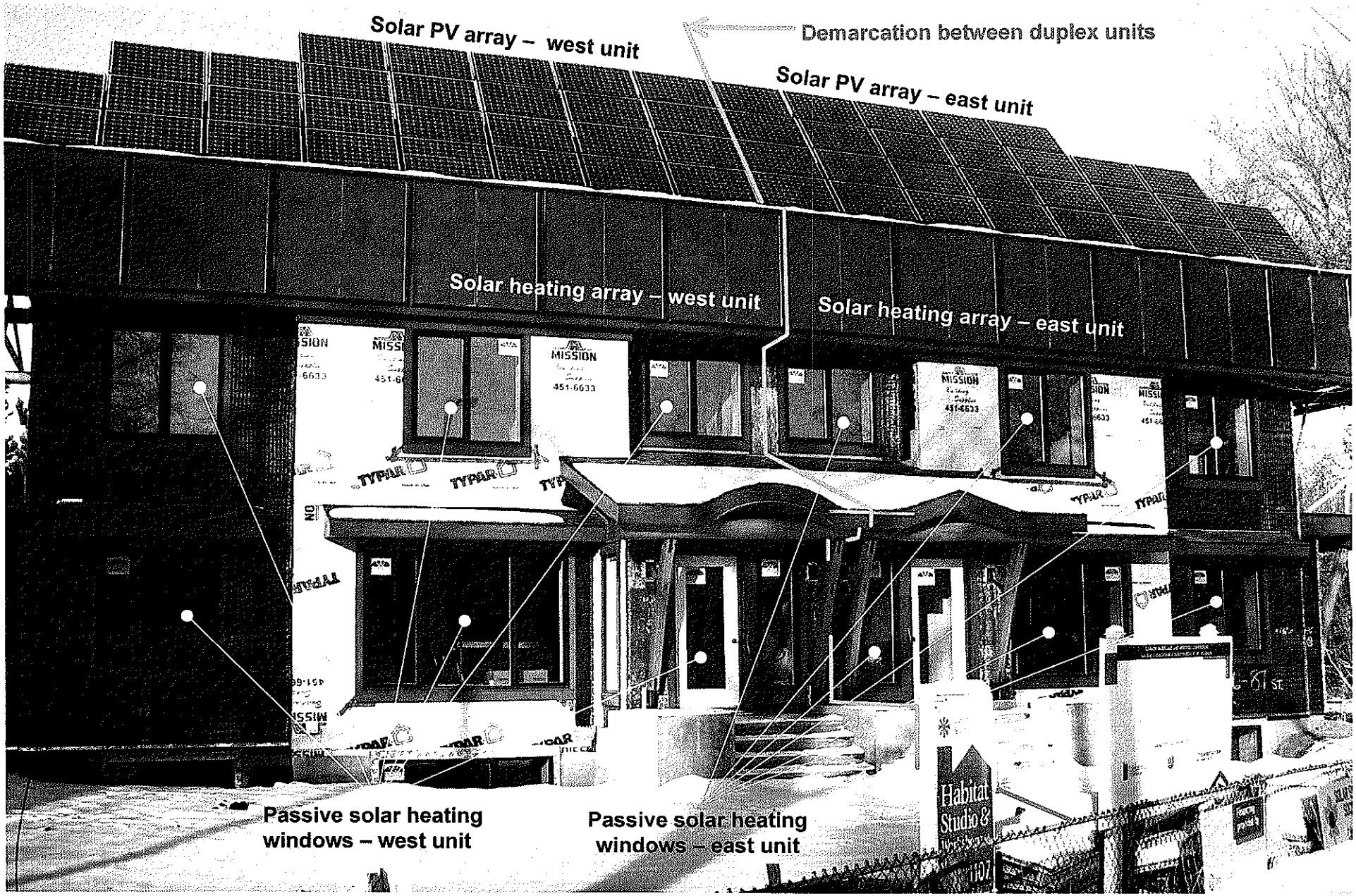
Electrical energy can utilize renewable sources such as geothermal, hydroelectric, wind, solar panels and methane from manure digesters or landfills.

Electrical heating technology now includes geothermal systems, radiant panels and thermal storage systems that utilize off peak electricity to provide heat throughout the day. All of these technologies are economically viable.

Under present law, many of Wisconsin's citizens are precluded from converting to these new electrical heating technologies due to the fact that their homes are not super-insulated.

Wisconsin should encourage development and use of new technology.

Homeowners throughout Wisconsin will benefit from passage of SB 381.



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Riverdale NetZero Energy House

EXTERIOR VIEW

DRAWING NO. **S1** REV 2

SCALE: NOT TO SCALE

Date: 2008 January 03

Site Description: Design, developed and under construction by Peter Amerongen

Site Location:
9924 and 9926 - 87 Street (west and east units of the duplex)

would not meet WI code due to elec. heat

OCONTO ELECTRIC
COOPERATIVE

Geothermal System Performance Report – 2007

Al and Jan Stranz
Abrams, Wisconsin

Power supplier – Oconto Electric Cooperative
Oconto Falls, Wisconsin

Geothermal system heats and cools 1440 sq. ft. ranch-style home, built in the early 1980's. Geothermal system was installed in 1994.

Home has unfinished basement and forced air system. Weatherization in the past 10 years has included new sidewall insulation and siding for a total of ~R-20, "pretty good" windows, weatherstripping, attic insulation increased to R-44, sill box insulation of R-19, and some basement wall insulation.

Oconto Electric Cooperative's dual fuel rate is used (radio controlled load management device.) During 2007, there were approximately 40 hours of control time during heating months, requiring the system to potentially activate the original propane furnace. Retention of the non-electric backup heating system allows this home to qualify for the dual fuel rate. The following consumption amounts include electric water heating.

Winter operation
Home is heated to 65 deg F from 10 PM until 4 PM the following day;
68 deg F from 4 PM until 10 PM.

9300 KWHs (priced at $0.036)	=	$335
Additional facility charge	=	$ 20
Heating Total	=	$355

Summer operation (June – September)
Thermostat is set at 76 deg F all the time.

1980 KWHs (priced at $0.036)	=	$ 72
Additional facility charge	=	$ 10
Cooling Total	=	$ 82

2007 Heating, Cooling & Water Heating = $437

Oconto Electric Cooperative's 2007 regular residential rate was $0.0998/KWH. Winter electric consumption on the regular rate would have cost $928 and summer electric use would have cost $198, for an annual total of $1,026. Previously, the home required approximately 1,100 gallons of LP annually for space heating and water heating purposes. (1,100 X $1.65/gallon LP = $1,815)

Electric Heat Comments for Senate Committee

Good afternoon, my name is Ed Lund and I am a Member Service Adviser at Richland Electric Cooperative in Richland Center, which is about 60 miles west of Madison. Thank you for taking time out of your busy schedules to listen to us.

Why am I here?
I think it's important to provide you just a little history on electric heat use in this state. For over 20 years, I have worked directly with members to help them save energy costs in heating their homes and businesses. During that time, through a program called Dual Fuel, members have saved thousands of dollars on their energy bills by using electric heat as part of this program. In return for the lower electric rate they receive, they agree to allow the co-op to manage their electric heat during "Peak Hours", which is when the demand for energy is higher. Their alternative heating system then turns on, usually automatically, to heat their home or business during these hours. Alternative systems may include fossil fuel systems such as LP gas or fuel oil or we have many members who use electric thermal storage systems. It's a win-win-win situation - for our member, the co-op and our power supplier.

Also, for my home, which is served by an investor owned utility, Alliant Energy, I am able to take advantage of lower cost electric rates to heat my home with their time of day program. Based on my current off-peak rate of 4.79 cents per kilowatt-hour, I will heat my 2700 square foot home, for about $600 this heating season. If I had to use LP gas, the fuel cost, based on last summer, pre-pay prices, would have been about $880 and based on current statewide LP gas prices would have been about $1,125 or as you see, getting close to double what I'm paying now.

And personally, for me, it wasn't necessarily about the cost of using one heat versus another, for me, the decision to use electric heat is purely about safety for my wife, children and grand-children.

The problem with the current law is that it doesn't allow homeowners to make a decision on what they feel is the best heating option. It's become more of a problem in the last couple of years because of new home inspections. New homes can no longer add electric heat and pass the Wis REScheck program. This means they are forced to put in fossil fuel burning systems. They cannot install efficient electric heat systems like air source or ground source heat systems or take advantage of off-peak rates like I do to use electric heat.

All we are asking for is fairness, so all residents of the state can make their own decision on what heating system to use for their home or business.

Natural gas not available in rural areas of Richland County or in many areas of state.

Liquid Petroleum (LP) and Fuel Oil only other alternatives and those fuels are considerably more expensive.

Equivalent cost of fuels for Richland Electric Cooperative members:

100% efficient electric heat (baseboard heaters, electric thermal storage heaters, electric boilers, electric plenum heaters) on Dual Fuel program is 5.9 cents per kilowatt hour.

90% efficient LP gas furnace at $1.41 per gallon (Currently at about $2.19 per gallon per the Energy Information Administration dated Jan 7, 2008)

85% efficient fuel oil furnace at $2.06 per gallon (Currently at about $3.13 per gallon per the Energy Information Administration dated Jan 7, 2008)

200% efficient air source heat pump is equivalent to a 90%efficient LP gas furnace using LP gas at a cost of about $ 0.71 cents per gallon.

300% efficient ground source heat pump is equivalent to a 90% LP gas furnace using LP gas at a cost of about $ 0.47 cents per gallon.